

CLAIMS

What is claimed is:

1. A system that facilitates representing a relational database in a different format, comprising a declarative description component that facilitates generating data that represents the relational database.
2. The system of claim 1, the data is generated from relational database schema information.
3. The system of claim 2, the schema information is in the form of metadata.
4. The system of claim 1, the description component derives logical and physical information from the relational database.
5. The system of claim 4, the physical information is harvested directly from schema information of the relational database.
6. The system of claim 4, the logical information is generated with annotation information associated with the relational database.
7. The system of claim 6, the annotation information is obtained at least one of manually by a user and automatically by the system.
8. The system of claim 6, the logical information describes a relationship between at least two tables of the database.
9. The system of claim 1, the declarative description component is based upon an XML syntax.
10. The system of claim 1, the data is segmented into smaller data portions.

11. The system of claim 1, the data is segmented to allow logical extensions thereof.

12. The system of claim 1, the data is a logical view of metadata of the relational database.

13. The system of claim 1, the description component generates the data with sufficient metadata to allow generation and/or execution of create, read, update, and delete operations against the relational database.

14. The system of claim 1, the description component derives physical information from the relational database to generate the data, which physical information is regenerated each time the description component executes against the database.

15. The system of claim 1, the data is updated by executing the description component against the database to overwrite the data.

16. The system of claim 1, the updated data preserves user-supplied extensions.

17. The system of claim 1, an application using the data initiates an update process of the data.

18. The system of claim 1, further comprising a classification component that performs an automated function.

19. The system of claim 18, the automated function determines at least one of when the data will be updated and what location will be updated.

20. The system of claim 18, the classification component is a support vector machine.

21. The system of claim 18, the automated function includes annotating physical information representative of the database to generate logical information.

22. The system of claim 21, the automated function further includes returning a degree of certainty that annotation of the physical information is correct.

23. A computer operating in accordance with the system of claim 1.

24. A system that represents a relational schema of a relational database in a different format, comprising a declarative description component that receives the relational schema in the form of metadata and generates a data file representative of a logical view thereof.

25. The system of claim 24, the description component derives logical and physical information from the metadata, which physical information is derived directly from the metadata, and which logical information includes annotations of the physical information.

26. The system of claim 25, the annotation information is added incrementally.

27. The system of claim 24, the data file is segmented into smaller data files to allow logical extensions thereof.

28. The system of claim 24, the data file is stored local to the database.

29. The system of claim 24, the declarative description component runs against the relational database from a location remote from the relational database.

30. The system of claim 24, the relational database is distributed across at least two network locations such that the description component runs against each location database to generate respective data files.

31. The system of claim 30, the respective data files are retrieved and processed to reconstruct the relational database.

32. The system of claim 30, the data files are retrieved and processed by corresponding applications in a disconnected environment.

33. The system of claim 24, the format is one of implementation-neutral and implementation-specific.

34. A method of representing a relational database, comprising:
accessing relational schema information of the relational database; and
generating declarative description data of the relational schema.

35. The method of claim 34, the declarative description data is based upon an XML syntax.

36. The method of claim 34, further comprising generating physical information from the relational schema information, the physical information is part of the declarative description data.

37. The method of claim 34, further comprising generating logical information by annotating physical information from the relational schema information.

38. The method of claim 34, further comprising segmenting the declarative description data into more manageable data.

39. The method of claim 34, further comprising updating the declarative description data when the relational database is changed.
40. The method of claim 34, the relational schema information is metadata.
41. The method of claim 34, further comprising reconstructing the relational database in a disconnected environment by processing the declarative description data.
42. The method of claim 34, restricting access to the declarative description data according to user profile privileges.
43. The method of claim 34, restricting access to the relational database while providing open access to the declarative description data.
44. A method of representing a relational database, comprising:
 - accessing metadata of the relational database;
 - generating physical data from the metadata according to a declarative description language;
 - generating logical data by annotating the physical data using the declarative description language; and
 - storing the physical and logical information in a data file.
45. The method of claim 44, further comprising accessing the data file to reconstruct the structure and/or data of the relational database in an offline environment.

46. A system that facilitates representing a relational database in a different format, comprising:

means for accessing metadata of the relational database;

means for generating physical data from the metadata according to a declarative description language;

means for generating logical data by annotating the physical data using the declarative description language; and

means for storing the physical and logical information in a data file.